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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,157	01/04/2006	Michiya Takemoto	281014US2PCT	8376
22850	7590	10/29/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
ANWAR, MOHAMMAD S				
ART UNIT		PAPER NUMBER		
2416				
NOTIFICATION DATE		DELIVERY MODE		
10/29/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/563,157

Applicant(s)

TAKEMOTO ET AL.

Examiner

MOHAMMAD ANWAR

Art Unit

2416

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 1/4/06, 10/15/07
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. Specification is objected to because of the following informalities:

Add a reference to PCT/JP03/11620 09/11/2003 in the first sentence of the specification.

- . Appropriate correction is required.

Claim Objections

2. Claim 1 is objected to because of the following informalities:

In claim 1 line 11 recites "bandwidth request amount" which seems to refer to "bandwidth request amount" in claim 1 line 4. If this is true, it is suggested to change "bandwidth request amount" to ---the bandwidth request amount ----.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4 lines 6-7 recites "the present bandwidth-update cycle" which has no antecedent basis.

In claim 2 line 2 “a boundary” and line 5 “a portion” are vague and indefinite. It is not known the metes and bound of the claimed invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5 and 8 are rejected under 35 U.S.C. 102(b) as being unpatentable by Spinnar et al. (20020080816).

For claim 1 , Spinar et al. disclose a station-side communicating apparatus that performs one-to-N communication with a plurality of subscriber devices via a time-division-multiple- access line (see paragraph 19 lines 1-3; paragraph 49 lines 21-23), and controls allocation of upload bandwidth shared by the subscriber devices by acquiring bandwidth request amount from the subscriber devices (see paragraph 63 lines 29-30), the station-side communicating apparatus comprising:
an allocation determining unit (see Figure 16(1670)) that determines a bandwidth allocation for each of the subscriber devices in each data-collection cycle (see paragraph 63 lines 9-23); and a history managing unit (see Figure 16 (1610)) that takes a history of a request increment from the bandwidth request amount acquired from more than one time of data collections (see paragraph 21 line 15, paragraph 181 lines 13-14); and an allocation amount allocated by the allocation determining unit for the bandwidth request amount (see paragraph 187 lines 6-15), and presents bandwidth request

amount to be a target for the allocation determination to the allocation determining unit by dividing the bandwidth request amount into a plurality of request increments indicated by the history (see paragraph 117 lines 29-32).

For claims 2 and 3, Spinar et al. disclose wherein the allocation determining unit detects a boundary between the request increments in the bandwidth request amount that is presented by the history managing unit for each of the subscriber devices (see paragraph 181 lines 1-24), and executes the bandwidth allocation for a portion of the bandwidth request amount (see paragraph 64 lines 1-3, paragraph 122 lines 13-15).

For claim 4, Spinar et al. disclose wherein when executing the bandwidth allocation for a portion of the bandwidth request amount by detecting a boundary between the request increments in the bandwidth request amount that is presented by the history managing unit for each of the subscriber devices (see paragraph 181 lines 1-24), if the bandwidth request amount has a remaining portion for which the allocation is not performed in the present bandwidth-update cycle (see paragraph 122 lines 9-15), the allocation determining unit determines a bandwidth to be allocated to a corresponding subscriber device in a next bandwidth-update cycle in advance using the remaining portion (see paragraph 127 lines 1-7; paragraph 76 lines 7-10, paragraph 166 lines 36-37).

For claim 5, Spinar et al. disclose wherein the history managing unit manages (see Figure 16 (1610)), when taking the history for each of the subscriber devices (see paragraph 21 lines 14-15), a temporal variation of the bandwidth request amount (see paragraph 181 line 4 and line 13), and disposes the request increments in the

bandwidth request amount to be presented to the allocation determining unit in such a manner that a temporal relation is recognizable between the request increments (see paragraph 183 lines 1-4), based on the temporal variation of the bandwidth request amount (see paragraph 181 line 4 and line 13), and the allocation determining unit sequentially determines the allocation for the request increments in the bandwidth request amount that is presented by the history managing unit for each of the subscriber devices from an oldest request increment (see paragraph 187 lines 1-20).

For claim 8, Spinar et al. disclose wherein the allocation determining unit classifies the request increments in the bandwidth request amount that is presented by the history managing unit for each of the subscriber devices into a plurality of groups with different priorities based on contract differences with respect to the subscriber devices, and executes the bandwidth allocation for the request increments from a group with a higher priority (see paragraph 126 lines 11-18, paragraph 43 lines 1-14, paragraph 116 lines 12-16).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spinar et al. (20020080816) in view of Wright et al. (6078568).

For claim 6, Spinar et al. disclose wherein the history managing unit manages (see Figure 16 (1610)), when taking the history for each of the subscriber devices (see paragraph 21 lines 14-15), a temporal variation of the bandwidth request amount (see paragraph 181 line 4 and line 13), based on the temporal variation of the bandwidth request amount (see paragraph 181 line 4 and line 13). Spinar et al. disclose all the subject matter but fails to mention and detects a transmission delay time of a packet

data remains in the subscriber device. However, Wright et al. discloses and detects a transmission delay time of a packet data remains in the subscriber device (see column 6 lines 59-62). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Wright et al. transmission delay time scheme into Spinar et al. bandwidth allocation scheme. The method can be implemented in the transmission unit. The motivation of doing this is to efficiently utilize the data packet transmission.

For claim 7, Spinar et al. disclose wherein the history managing unit manages (see Figure 16 (1610)), when taking the history for each of the subscriber devices (see paragraph 21 lines 14-15), a temporal variation of the bandwidth request amount (see paragraph 181 line 4 and line 13). Spinar et al. disclose all the subject matter detects a transmission delay time of a packet data remains in the subscriber device (see column 6 lines 59-62), and selects, as the bandwidth request amount to be presented to the allocation determining unit (see paragraph 181 line 5), the bandwidth request amount corresponding to the packet data with the large transmission delay time (see paragraph 42 lines 1-16). Spinar et al. disclose all the subject matter but fails to mention and when the detected transmission delay time is large. However, Wright et al. discloses and detects a transmission delay time of a packet data remains in the subscriber device (see column 6 lines 59-62). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Wright et al. transmission delay time scheme into Spinar et al. bandwidth allocation scheme. The method can be

implemented in the transmission unit. The motivation of doing this is to efficiently utilize the data packet transmission.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rostoker et al. (5793416) and Jackson et al. (20020152305).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD ANWAR whose telephone number is (571)270-5641. The examiner can normally be reached on Monday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ferris W. Derrick can be reached on 571-272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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